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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,292	04/22/2004	Kunio Goto	12014-0017DV	7228
22902	7590	01/25/2006	EXAMINER	
CLARK & BRODY 1090 VERMONT AVENUE, NW SUITE 250 WASHINGTON, DC 20005			JOLLEY, KIRSTEN	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,292

Applicant(s)

GOTO, KUNIO

Examiner

Kirsten C. Jolley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 17-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/361,556.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/22/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17 does not further limit claim 2, which it depends from, because claim 17 is a duplicate of claim 2.
2. Claims 5 and 20 are objected to because of the following informalities: In line 3 of claims 5 and 20, "polytetrafluoroethylene" is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-7 and 17-22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsuru et al. (US 6,027,145).

Tsuru et al. discloses a process for the surface treatment of a threaded joint for steel pipes comprising a pin and a box, each having a contact surface including a threaded portion and an unthreaded metal contact portion, comprising the steps of: applying a coating fluid containing a resin and a lubricating powder in a solvent to the contact surface of at least one of the pin and the box, and drying and baking the applied coating at a temperature in the range of 180-270 C (col. 21, lines 1-19).

Tsuru et al. lacks a specific teaching of drying the applied coating by multistage heating. It is the Examiner's position that a threaded joint that is initially at room temperature, or any lower temperature, and is heated at a temperature in the range of 180-270 C will first be heated at a lower temperature in the range of 70-150 C in the process of ramping up the temperature of the joint from room temperature (or a temperature lower than the oven temperature) to the oven temperature, even if only for a fraction of a second.

Alternatively, the Examiner notes that it is well known in the coating art to heat coated substrates in stages in order to obtain more uniform heating of the coated substrate and more even solvent removal from the coating with an expected loss of efficiency in processing time. It is the Examiner's position that it would have been obvious for one having ordinary skill in the art to have performed the heating and baking step in Tsuru et al.'s process by heating in two stages in order to improve heating and solvent removal efficiency.

As to claims 2 and 17, Tsuru et al. teaches a preheating step in col. 21, lines 20-26 and Examples 5, 7, 15, and 16, etc.

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As to claims 5 and 20, Tsuru et al. teaches that the lubricating powder is a molybdenum disulfide or tungsten disulfide (col. 18, lines 60-63).

As to claims 6-7 and 21-22, Tsuru et al. teaches that a manganese phosphate chemical formation coating layer is formed on the threaded joint, forming a contact surface to which the coating fluid is applied. Tsuru et al. teaches that the manganese phosphate chemical formation layer is porous (col. 15, lines 61-67), and the surface roughness of the phosphate chemical formation layer is in the range of 3-30 $\mu\text{m R}_M$ (col. 13, lines 37-38).

As to claims 3-4 and 18-19, Tsuru et al. is silent with regard to the hardness and adhesive strength of the solid lubricant coating formed. However it is noted that Tsuru et al. teaches that a lubricant coating has excellent hardness and toughness and the adhesive property of it to the manganese phosphate chemical formation layer is very high (col. 21, lines 46-67). It is the Examiner's position that the hardness and adhesive strength of the layer would be within the claimed range since the coating materials and process steps of Tsuru et al. are materially similar to that claimed by Applicant. Any differences in properties between the claimed invention and that of Tsuru et al. must have been caused by process variables not claimed in the instant application.

Conclusion


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited in parent case 10/361,556 have been cited on the attached PTO-892.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj